Inventor: Richard A. Steiner

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. An end connector compression tool, comprising:

(a) a body;

(b) supports to support a cable and uncompressed end connector parts;

(c) a compression member axially movable with respect to said body to fixedly attach said end connector parts to said cable by compression of said end connector parts;

(d) a handle rotatably attached to said compression member at a first pivot point; and

(e) a link rotatably attached to said handle at a second pivot point and to said body at a third pivot point, such that rotation of said handle from an open position to a closed position effects compressive fixed attachment of said end connector parts to said cable.

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- 2. An end connector compression tool, as defined in Claim 1, wherein, when a major axis of said end connector compression tool is horizontal:
- (a) said third pivot point is a distance "A" above said first pivot point;
- (b) said second pivot point and said third pivot point are spaced apart approximately a distance 8.0 'A";
- (c) said first pivot point and said second pivot point are spaced apart approximately a distance 1.4"A";
- (d) said first pivot point and said third pivot point are spaced apart approximately a distance 8.4"A" when said end connector compression tool is in said fully open position;
- (e) said second pivot point is spaced approximately a distance 0.2"A" above said first pivot point when said end connector compression tool is in a fully closed position; and
- (f) said first pivot point and said third pivot point are spaced apart approximately a distance 9.5"A" when said end connector compression tool is in said fully closed position.
- 3. An end connector compression tool, as defined in Claim 1, wherein: stops formed at distal ends of said body and said handle coengage when said end connector compression tool is in its fully closed position, to provide tactile feedback that said end connector parts are compressively attached to said cable.
- 4. An end connector compression tool, as defined in Claim 1, wherein: said supports comprise as pair of spring loaded fingers and an end of said compression member.
- 5. An end connector compression tool, as defined in Claim 1, wherein: one of said supports is fixedly disposed in a transverse slot defined in said body.

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6. An end connector compression tool, as defined in Claim 5, wherein: said one of said supports comprises a pair of spring loaded fingers.

- 7. An end connector compression tool, as defined in Claim 5, wherein:
- (a) said one of said supports is an optional sliding plate selectively moveable in said transverse slot between active and inactive positions;
- (b) when said optional sliding plate is in said active position, said sliding plate serves as a first support;
- (c) an end of said/compression member serves as a second support.
- 8. An end connector compression tool, as defined in Claim 7, wherein: when said optional sliding plate is moved to said inactive position, an end extension attached to an end of said end connector compression tool serves as said first support.

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9. An end connector compression tool, as defined in Claim 1, wherein said supports include:

- (a) first and second support members and first and second auxiliary compression jaws;
- (b) said first support member comprising a pair of spring loaded fingers;
- (c) said second support member comprising an end of said compression member;
- (d) said first auxiliary compression jaw being fixed and an extension of said body;
- (e) said second auxiliary compression jaw being moveable and an extension of said compression member;

wherein: one of (1) said first and second support members and (2) said first and second auxiliary compression jaws can be selected to support said cable and said uncompressed end connector parts and used to fixedly compressively attach said end connector parts to said cable..

10. An end connector tool, as defined in Claim 1, wherein: said end connector tool has a mechanical advantage of on the order of about 4:1 when in said open position and on the order of about 200:1 when near said closed position.

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- 11. An end connector tool, as defined in Claim 1, further comprising:
- (a) a opening defined through said compression member sized to accept therein a coaxial cable;
- (b) two cutting blades disposed one on either side of said compression member so as to cut partially through layers of a coaxial cable inserted in said opening;
- (c) a return spring disposed so as to bias said compression member toward said coaxial cable and said cutting blades toward and into said coaxial cable, biasing of said compression member effecting movement of said handle from a closed position to an open position; and
- (d) an opening defined through said tool to permit rotation of said tool about said coaxial cable to thus cut partially through said layers of said coaxial cable.
- 12. An end connector compression tool, as defined in Claim 11, further comprising: a handle lock to prevent said movement when said handle is in said closed position.

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